Appendix C

**Soil Descriptions** 

## Appendix C

**South Bend Site Soil Description** 

SOUTH BEND SITE PHYSICAL SOIL DESCRIPTIONS								
SOIL UNIT	MAP UNIT	FARMLAND STATUS	DRAINAGE	EROSION CLASS	RUNOFF	LIQUID LIMIT RATING (%)	HYDRIC PRESENCE	
Adrian muck, undrained, 0 to 1 percent slopes	AbhAU	Not prime farmland	Very Poorly Drained	Class 1	Low/High		Predominantly Hydric	
Auten loam, 0 to 1 percent slopes	AxvA	Prime farmland if drained	Somewhat Poorly drained	Class 1	Moderate/ High	9.2	Not hydric	
Brookston loam, 0 to 1 percent slopes	BuuA	Prime farmland if drained	Poorly drained	Class 1	Moderate/ High		Predominantly Hydric	
Hillsdale sandy loam, 0 to 1 percent slopes	HkkA	All areas are prime farmland	Well drained	Class 1	Moderate	24.5	Not hydric	
Hillsdale sandy loam, 1 to 5 percent slopes	HkkB	All areas are prime farmland	Well drained	Class 1	Moderate	24.5	Not hydric	
Hillsdale-Tracy sandy loams, 5 to 10 percent slopes, eroded	HkpC2	Not prime farmland	Well drained	Class 2	Moderate	24.5	Not hydric	
Hillsdale-Tracy sandy loams, 10 to 18 percent slopes, eroded	HkpD2	Not prime farmland	Well drained	Class 2	Moderate	24.5	Not hydric	
Martinsville loam, 0 to 1 percent slopes	MfaA	All areas are prime farmland	Well drained	Class 1	Moderate	34.1	Not hydric	
Martinsville loam, 1 to 5 percent slopes, eroded	MfaB2	All areas are prime farmland	Well drained	Class 2	Moderate	35.4	Not hydric	
Martinsville loam, 5 to 10 percent slopes, eroded	MfaC2	Not prime farmland	Well drained	Class 2	Moderate	35.4	Not hydric	
Milford silty clay loam, 0 to 1 percent slopes	MouA	Prime farmland if drained	Poorly drained	Class 1	Somewhat High/High	42.6	Hydric	
Rensselaer mucky loam, 0 to 1 percent slopes	RenA	Prime farmland if drained	Poorly drained	Class 1	Moderate/ High	26.8	Hydric	
Rensselaer loam, 0 to 1 percent slopes	ReyA	Prime farmland if drained	Poorly drained	Class 1	Moderate/ High	26.8	Predominantly hydric	
Riddles-Oshtemo fine sandy loams, 1 to 5 percent slopes	RopB	All areas are prime farmland	Well drained	Class 1	Moderate	25.3	Not hydric	
Southwest silt loam, 0 to 1 percent slopes	SnlA	Prime farmland if drained	Poorly drained	Class 1	Somewhat High/High	33.6	Hydric	

Tracy sandy loam, 1 to 5 percent		All areas are prime					
slopes	TmpB	farmland	Well drained	Class 1	Moderate	14.6	Not hydric
Tracy sandy loam, 5 to 10							
percent slopes, eroded	TmpC2	Not prime farmland	Well drained	Class 2	Moderate	15.2	Not hydric
Tyner loamy sand, 5 to 10			Excessively				
percent slopes	TxuC	Not prime farmland	drained	Class 1	Low	0.0	Not hydric
Tyner loamy sand, 10 to 18			Excessively				
percent slopes	TxuD	Not prime farmland	drained	Class 1	Low	0.0	Not hydric
Udorthents, loamy	Uam	Not prime farmland	Well drained	Class 1	Moderate		Not hydric
Whitaker loam, 0 to 1 percent			Somewhat poorly		Moderate/		
slopes	WtbA	Prime farmland if drained	drained	Class 1	High	27.1	Not hydric

Source: NRCS 2011 St. Joseph County Regional Soil Survey

<sup>&</sup>lt;sup>1</sup>Accelerated Erosion Classes apply to both water and wind erosion; the absolute amount of erosion is not specified due to range of horizon thicknesses. Class 1 have lost some, but less than 25% of the original A and/or E horizons. Class 2 have lost between 25% and 75% of their original A and/or E horizons. Class 3 have lost more than 75% of their original A and/or E horizons, and Class 4 have lost all of their original A and/or E horizons.

<sup>&</sup>lt;sup>2</sup>Liquid Limit Rating (%) indicates the plasticity characteristics of a soil; i.e. the water content of a soil (percent by weight basis) at which the soil changes from a plastic to a liquid state. Soils that have a high liquid limit have the capacity to hold a lot of water while maintaining a plastic or semi-solid state. Values are to a depth of 15 feet.

## Appendix C

**Elkhart Site Soil Description** 

ELKHART SITE PHYSICAL SOIL DESCRIPTIONS							
				EROSION		LIQUID LIMIT	HYDRIC
SOIL UNIT	MAP UNIT	FARMLAND STATUS	DRAINAGE	CLASS <sup>1</sup>	RUNOFF	RATING (%) <sup>2</sup>	PRESENCE
Brookston loam, 0 to 1 percent					Moderate/		Predominantly
slopes	BuuA	Prime farmland if drained	Poorly Drained	Class 1	High	31.9	hydric
Crosier loam, 0 to 1 percent			Somewhat		Somewhat		
slopes	CvdA	Prime farmland if drained	Poorly Drained	Class 1	High/High	27.6	Not hydric
Crosier loam, 1 to 4 percent			Somewhat		Somewhat		
slopes	CvdB	Prime farmland if drained	Poorly Drained	Class 1	High/High	27.6	Not hydric
Riddles-Oshtemo fine sandy		All areas are prime					
loams, 0 to 1 percent slopes	RopA	farmland	Well Drained	Class 1	Moderate	25.3	Not hydric
Riddles-Oshtemo fine sandy		All areas are prime					
loams, 1 to 5 percent slopes	RopB	farmland	Well Drained	Class 1	Moderate	25.3	Not hydric
Riddles-Metea complex, 5 to 10							
percent slopes, eroded	RoqC2	Not prime farmland	Well Drained	Class 2	Moderate	25.5	Not hydric
Williamstown loam, 0 to 1			Moderately Well		Somewhat		
percent slopes	WoaA	Prime farmland if drained	Drained	Class 1	High	28.7	Not hydric
Williamstown-Crosier complex, 1			Moderately Well		Somewhat		
to 5 percent slopes	WobB	Prime farmland if drained	Drained	Class 1	High	28.7	Not hydric

Source: NRCS 2011 Elkhart County Regional Soil Survey

<sup>&</sup>lt;sup>1</sup>Accelerated Erosion Classes apply to both water and wind erosion; the absolute amount of erosion is not specified due to range of horizon thicknesses. Class 1 have lost some, but less than 25% of the original A and/or E horizons. Class 2 have lost between 25% and 75% of their original A and/or E horizons. Class 3 have lost more than 75% of their original A and/or E horizons, and Class 4 have lost all of their original A and/or E horizons.

<sup>&</sup>lt;sup>2</sup>Liquid Limit Rating (%) indicates the plasticity characteristics of a soil; i.e. the water content of a soil (percent by weight basis) at which the soil changes from a plastic to a liquid state. Soils that have a high liquid limit have the capacity to hold a lot of water while maintaining a plastic or semi-solid state. Values are to a depth of 15 feet.